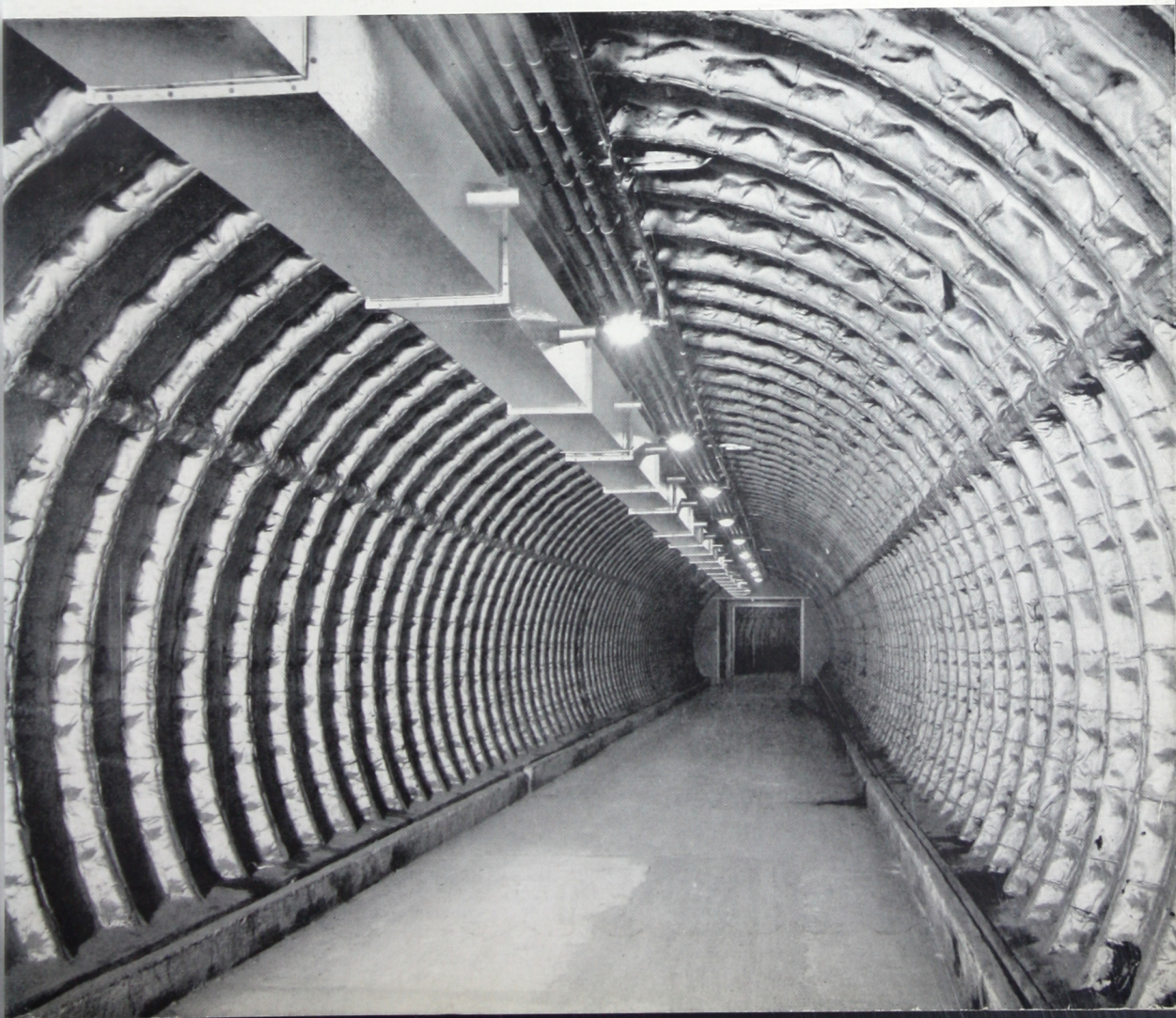


HOPE'S



VENTILATION  
AND GAS FILTRATION  
FOR AIR RAID SHELTERS





HOPE VENTILATION



& GAS FILTRATION

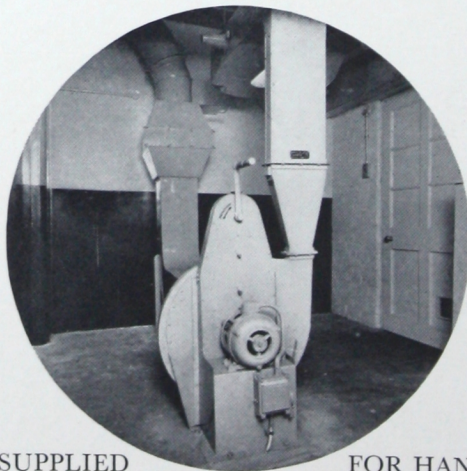
We are prepared to design and fix complete ventilating apparatus for the supply of fresh and filtered air to all types of buildings and shelters.

With a suitable ventilating system any number of people can collect in shelters or ambulance posts and can be accommodated for any length of time.

Our installations usually consist of ventilating units driven electrically from the supply mains or by diesel sets, or alternatively, by hand or pedal drive, as illustrated.

Ductwork is provided for distributing the filtered air through special nozzles into the various rooms, according to requirements.

Full particulars of the correct installation to suit any requirement will gladly be given on application to our nearest office.



APPARATUS CAN BE SUPPLIED

FOR HAND OPERATION ONLY



## INSTALLATION COSTS

TYPE 1 *For small shelters and private residences.*

For eight and up to twenty persons, approximate cost £23 to £42.  
Equipment consists of gas filter, fan, inlet and air diffuser.

TYPE 2 *For medium size shelters for private residences and small office buildings.*

For 25 to 50 persons, approximate cost £65 to £98.  
Equipment consists of manual drive fan and gas filter, inlet duct with standby electric motor.

TYPE 3 *For large office buildings, factories, stores and public shelters.*

For 25 to 500 persons, approximate cost £50 to £650.  
Equipment consists of an electrically driven fan with manual drive for use in case of emergency.

TYPE 4 *As above, but fitted with gas filter.*

For 25 to 500 persons, approximate cost £75 to £1,050.  
An extra price can be quoted for a standby electrical generator.

## GENERAL INFORMATION

Air for ventilation and breathing should be at least 2.5 cubic feet per person a minute where the occupants are at rest, and not less than 15 cubic feet per person if the occupants are expected to carry out work.

Agitator or wall fans assist in providing comfort conditions.

One 9 inch fan per 300 sq. ft. of floor area with a minimum of one per shelter is advisable.

All hot water and heating pipes should be either removed from the shelters or efficiently lagged to conserve heat.

Minimum lighting should be 15 watts per 100 sq. ft. of floor area.

All electrical services should be arranged to connect direct on to the live side of the main switch.

These services should be separate from all other circuits in the building.



HOPE VENTILATION



& GAS FILTRATION

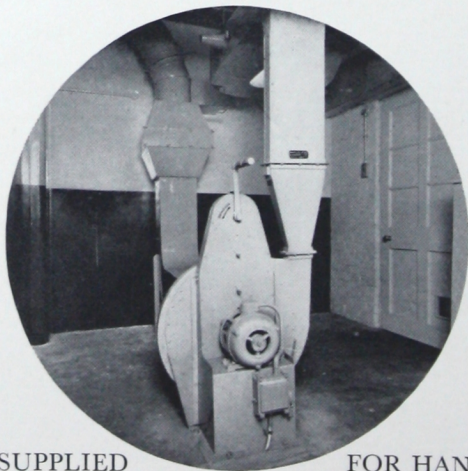
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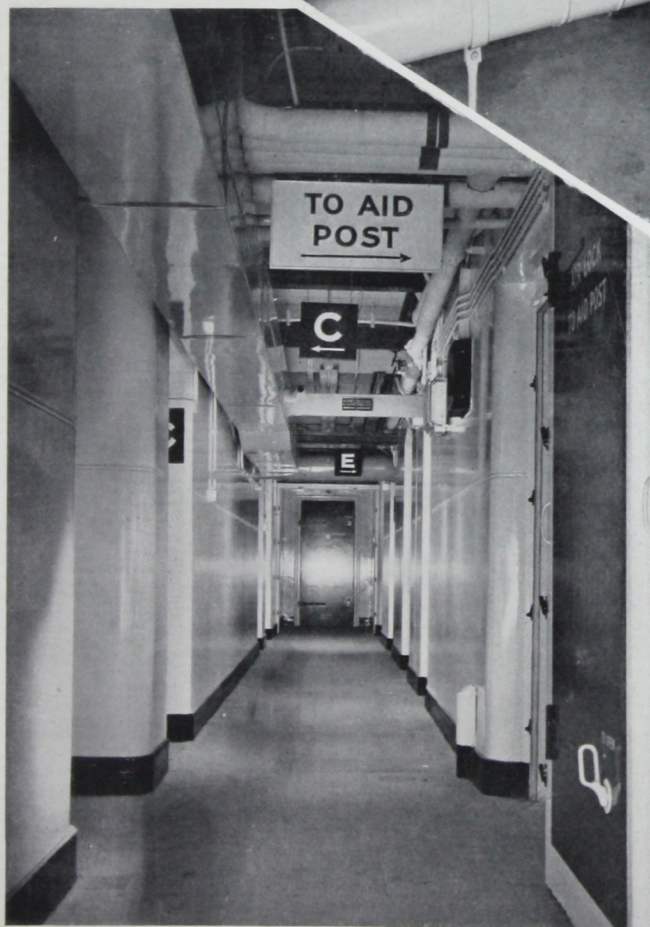
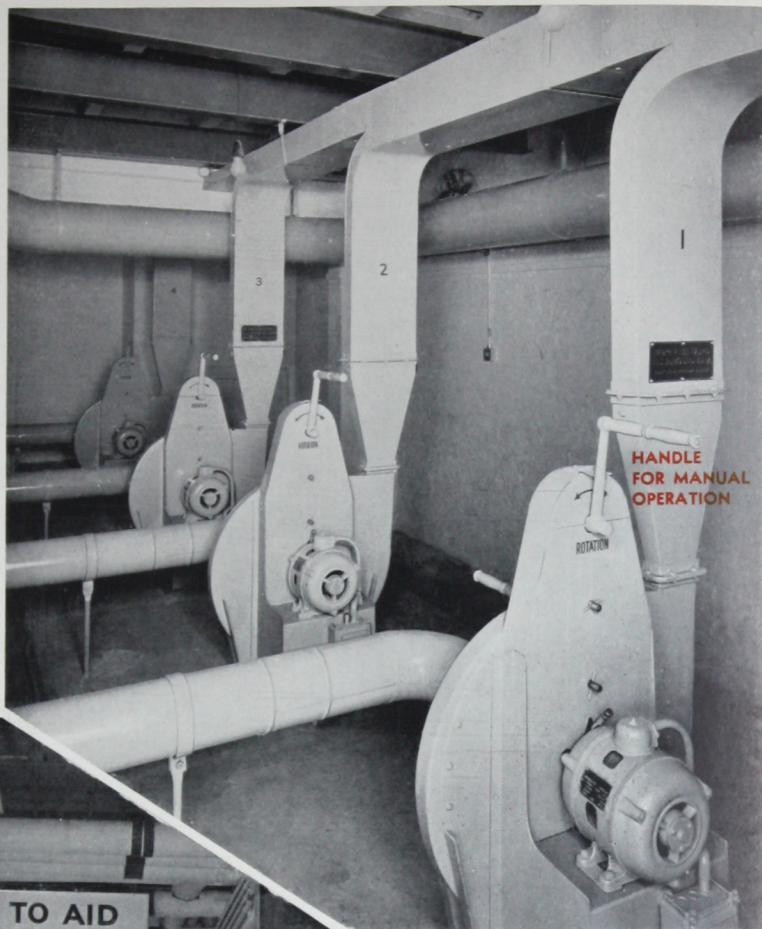


# HOPE



## A·R·P

VENTILATING  
APPARATUS



The above photograph shows combined manual and electrically driven fan sets, each providing air for 100 persons.

On the left is illustrated the central corridor in a London refuge showing main air distributing duct at ceiling level.

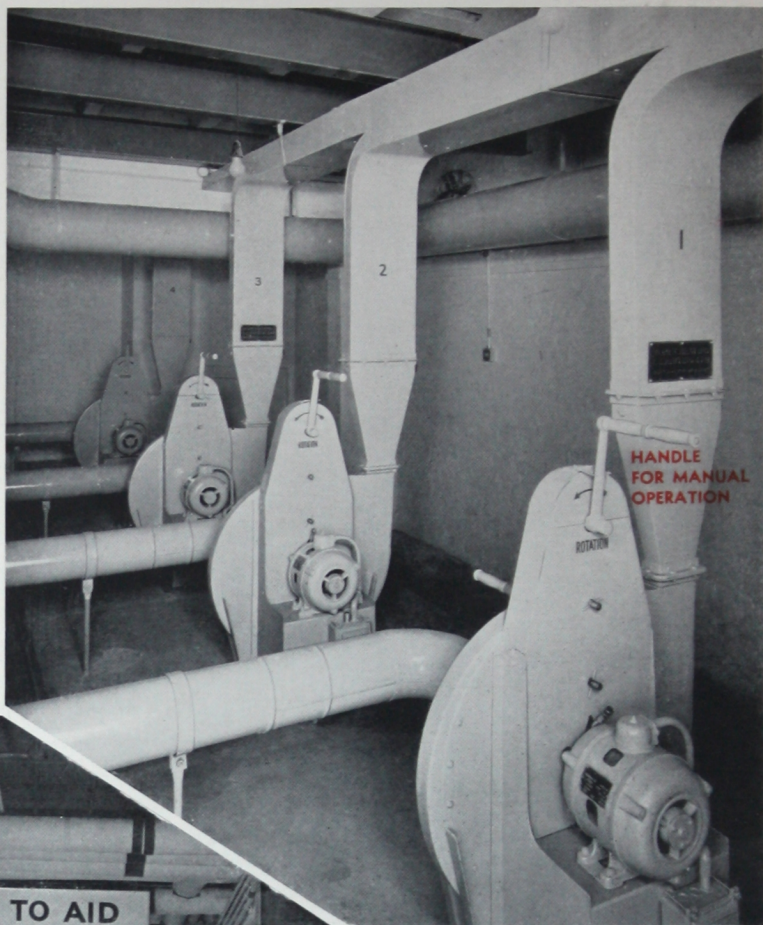


# HOPE



## A·R·P

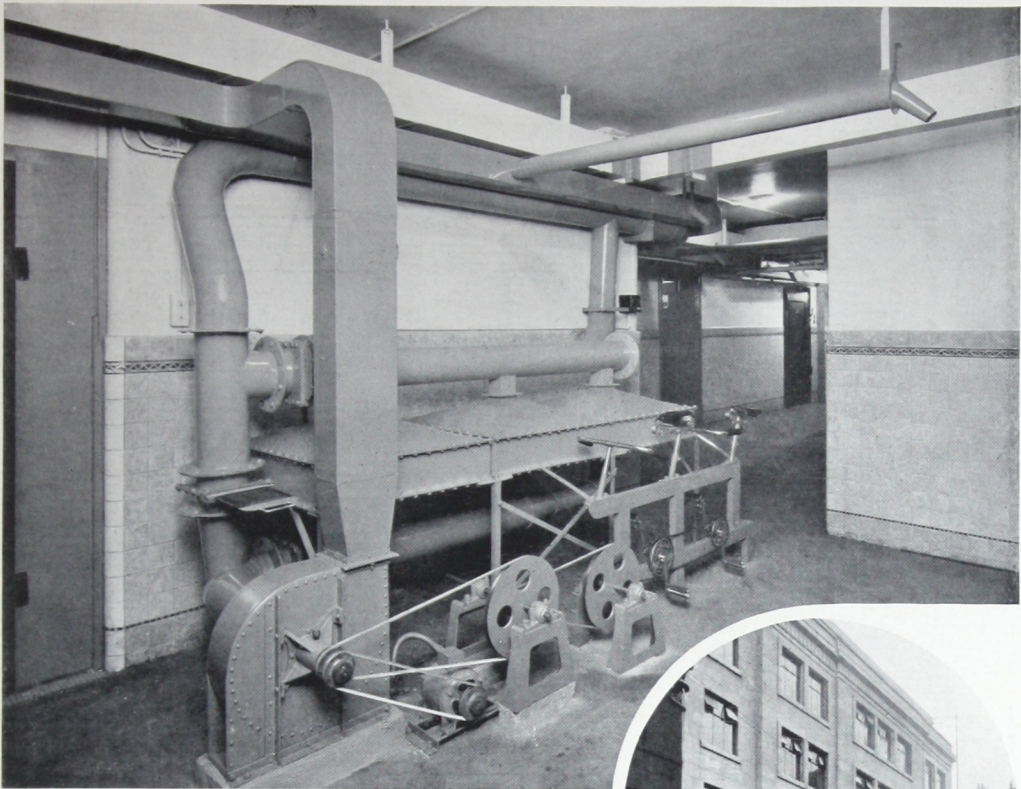
VENTILATING  
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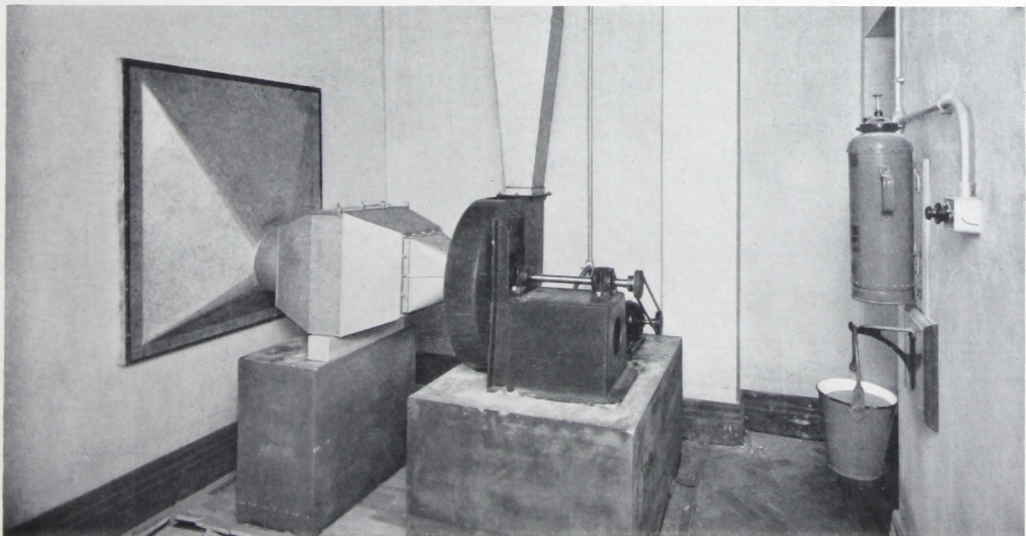
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## LEEDS PROVINCIAL BUILDING SOCIETY, Albion Street, Leeds.

Above is a general view of gas filtration plant with combined pedal and electrically-driven fan in an A·R·P shelter for 250 persons.



A·R·P refuge in Newcastle-on-Tyne showing dust filter, electrically-driven fan (*emergency Diesel generator not shown*), main air inlet and delivery ducts.



HOPE VENTILATION



& GAS FILTRATION

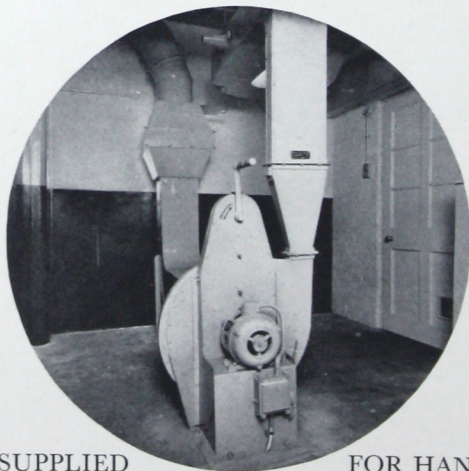
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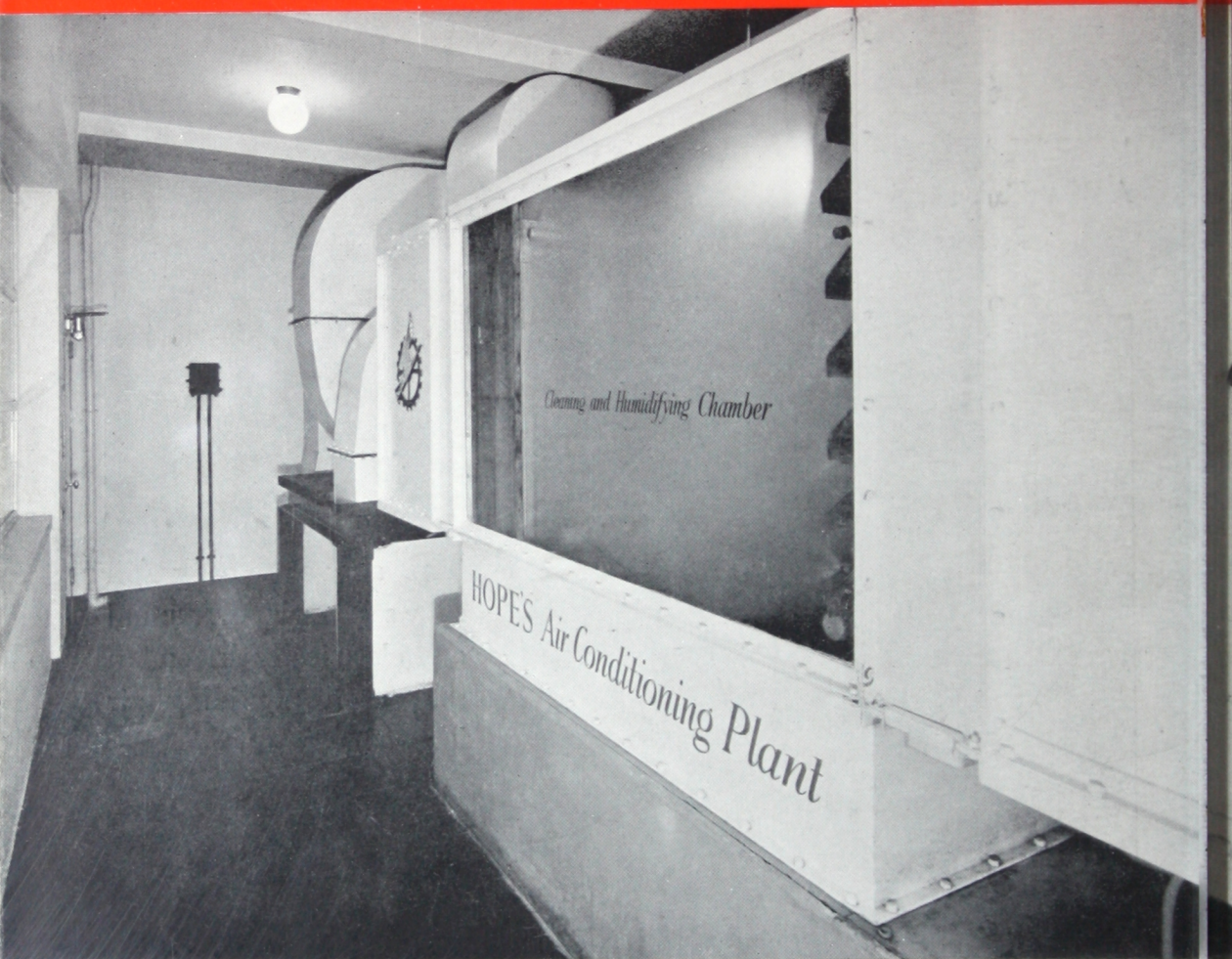


*Hope's Heating & Lighting Ltd. will be pleased to arrange for their local representatives to call upon you and make a preliminary survey. All enquiries received by any of our offices will have the immediate attention of specialists*



# HOPE'S

## AIR-CONDITIONING ENGINEERS



AIR CONDITIONING PLANT at 17 Berners Street, London, W. 1

### HOPE'S HEATING & LIGHTING LTD

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LEEDS: Provincial House, Albion Street, Leeds Leeds 20708

MANCHESTER: Westminster Bank House, 3 York St. Deansgate 3991

NEWCASTLE-ON-TYNE: 5 Higham Place Newcastle-on-Tyne 21273